

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### Listing of Claims

Claim 1. (Currently Amended) A system for skill management of a plurality of knowledge workers in a software industry based on continuous tracking of skills obtained by said knowledge workers, said system comprising:

~~\_\_\_\_\_ (a) a skill organizer subsystem for tracking of skills of said plurality of knowledge workers, said skill organizer comprising: a qualification management element for managing skills of said plurality of knowledge workers based on qualification; a resume management element for managing skills of said plurality of knowledge workers based on resume; and a project information management element for managing skills of said plurality of knowledge workers based on project information;~~

~~\_\_\_\_\_ (b) a skills assessment subsystem for assessing skills of said plurality of knowledge workers;~~

~~\_\_\_\_\_ (c) a skill evolution subsystem for incrementally updating skills of said plurality of knowledge workers;~~

~~\_\_\_\_\_ (d) a skill matching subsystem for matching skills of said plurality of knowledge workers with respect to a set of requirements; and~~

~~\_\_\_\_\_ (e) a skill representation subsystem for managing representation of a plurality of key elements of said system comprising qualification, resume, reference, past work experience, and current work experience. of possessed skills associated with knowledge workers and identifying a knowledge worker to meet project requirements, wherein an identified knowledge worker of said plurality of knowledge workers, a possessed skill is a part of a plurality of skills associated with said system, and said plurality of skills is related with each other through a skill hierarchy, said system comprising:~~

~~\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to assess a plurality of possessed skills associated with a knowledge worker based on a plurality of rules, a plurality of qualification impact functions, and a plurality of experience impact functions;~~

~~\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed~~

by a processor of the computer, cause the processor to evolve said plurality of possessed skills based on contributions in projects participated by said knowledge worker, and appraisals associated with said knowledge worker during a plurality of training sessions;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to match between a knowledge worker and a project requirement of a plurality of project requirements,

\_\_\_\_\_ wherein the extent of the match is an exact match if a required skill of said project requirement and a required period of requirement of said skill based on said project requirement matches exactly with an available skill of said knowledge worker and an available period of said knowledge worker, wherein said exact matching is based on said required skill, said available skill, said required period, and said available period, said extent of match is a semi-exact match if said required skill or said required period match only approximately with said available skill or said available period, wherein said approximate matching of said required skill and said available skill is based on a path length between said required skill and said available skill based on said skill hierarchy or a degree of overlap between said required period and said available period, and

\_\_\_\_\_ said extent of match is an approximate match if said required skill and said required period match only approximately with said available skill and said available period, wherein said approximate matching of said required skill and said available skill is based on a path length between said required skill and said available skill with respect to said skill hierarchy and a degree of overlap between said required period and said available period;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to obtain a plurality of project specific requirements, wherein each of said plurality of project specific requirements is a part of a plurality of project requirements of said plurality of project requirements;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to divide said plurality of project specific skills into a plurality of non-overlapping skills, wherein a period 1 associated with a skill 1 of a plurality of non-overlapping skills of said plurality of non-overlapping skills and a period 2 associated with a skill 2 said plurality of non-overlapping skills are such that said period 1 and said period 2 do not overlap;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed

by a processor of the computer, cause the processor to determine a total number of distinct skills based on said plurality of non-overlapping skill;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to obtain a plurality of multiplicity factors associated with said plurality of non-overlapping skills, wherein said each of said plurality of multiplicity factors denote the number of resources required of a non-overlapping skill of said plurality of non-overlapping skills based on said plurality of project specific requirements;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to obtain a plurality of project periods associated with said plurality of non-overlapping skills based on said plurality of project specific requirements;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to form a skill matrix, wherein said skill matrix comprises a pre-defined number of variations of each of said plurality of non-overlapping skills and is based on said plurality of multiplicity factors with each element of said skill matrix being associated with a variation of a non-overlapping skill and a particular non-overlapping skill, and is a value between 0 and 1 with values close to 1 indicating closeness of said variation of said non-overlapping skill to said particular non-overlapping skill with respect to said skill hierarchy;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to form a resource matrix, wherein said resource matrix is based on said plurality of non-overlapping skills and said plurality of multiplicity factors with each element of said resource matrix being associated with a knowledge worker of said plurality of knowledge workers and a non-overlapping skill of said plurality of non-overlapping skills, and is a value between 0 and 1 with values close to 1 indicating the availability of said knowledge worker based on a plurality of possessed skills of said plurality of possessed skills associated with said knowledge worker and said plurality of project periods;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to compute a plurality of resource skill variation values, wherein a resource skill variation value of a plurality of resource skill

variation values of said plurality of resource skill variation values is a product of a resource element of said resource matrix and a skill element of said skill matrix, wherein said resource element is associated with a knowledge worker of said plurality of knowledge workers and a non-overlapping skill of said plurality of non-overlapping skills, said skill element is associated with said non-overlapping skill and a variation of said non-overlapping skill, and said resource skill variation value is based on said extent of match between said knowledge and a project requirement of said plurality of project specific requirements associated with said non-overlapping skill;

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to maximize a summation of product of a resource skill variation assignment and a resource skill variation value, wherein said resource skill variation assignment is a part of a plurality of resource skill variation assignments and is associated with a knowledge worker of said plurality of knowledge workers with a variation of a non-overlapping skill of said plurality of non-overlapping skills with a value of 1 indicating the assignment of said resource and a value of 0 indicating the non-assignment of said resource, said resource skill variation value is a part of a plurality of resource skill variation values of a plurality of resource skill variation values of said plurality of resource skill variation values associated with said knowledge worker, said non-overlapping skill, and said variation of said non-overlapping skill, the sum of said plurality of resource skill variation assignments is said total number of distinct skills, and the sum of said plurality of resource skill variation assignments over said plurality of knowledge workers and said plurality of non-overlapping skills is 1; and

\_\_\_\_\_ a computer processor having instructions stored thereon, which when executed by a processor of the computer, cause the processor to form a plurality of identified knowledge workers of said plurality of right knowledge workers based on said plurality of said resource skill variation assignments and said plurality of project specific requirements.

Claims 2-13 (Cancelled)